

Claims

What is claimed is:

1. A universal remote control for providing wireless remote control of one or more devices, said devices being equipped for remote control by
5 respective original remote controls having visual appearances different from one another, said universal remote control comprising:

a memory that stores one or more descriptions associated with one or more original remote controls that are selectively emulated by the universal remote control, said descriptions including information describing the visual
10 appearances of the original remote controls that the descriptions are associated with; and,

a graphical user interface upon which is displayed a representation of one of the original remote controls selected for emulation by the universal remote control, said representation having a visual appearance substantially the same
15 as the original remote control being emulated.

2. The universal remote control of claim 1, wherein the graphical user interface is implemented on a touch screen liquid crystal display.

3. The universal remote control of claim 1, wherein the representation includes soft buttons that correspond to actual buttons on the original remote control being emulated, said soft buttons having substantially the same
20 appearance and relative location on the graphical user interface as the actual buttons have on the original remote control being emulated.

4. The universal remote control of claim 3, further comprising:
a transmitter that emits signals in accordance with a user touching the
25 soft buttons, said signals emitted from the transmitter mimicking those that the original remote control being emulated emits when the corresponding actual buttons are pressed thereon.

5. The universal remote control of claim 4, wherein the transmitter is an infrared transmitter that emits infrared signals or a radio frequency transmitter that emits radio frequency signals.

6. The universal remote control of claim 1, further comprising:
5 an external interface, said external interface arranged to receive descriptions for original remote controls from a source external to the universal remote control, said received descriptions being stored in the memory.

7. The universal remote control of claim 6, wherein the external interface is a serial port, a universal serial bus port, or a communications port.

10 8. A method of emulating one or more original remote controls having visual appearances that are different from one another, said method comprising:
(a) storing descriptions of each original remote control to be emulated, said descriptions including information describing the visual appearances of the original remote controls to which the descriptions apply;
15 (b) determining which one of the original remote controls to emulate; and,
(c) displaying a replica of the original remote control being emulated, said replica having a visual appearance substantially the same as the original remote control being emulated.

20 9. The method of claim 8, further comprising:
providing in the displayed replica soft buttons that correspond to actual buttons on the original remote control being emulated, said soft buttons having substantially the same appearance and relative location on the replica as the actual buttons have on the original remote control being emulated.

25 10. The method of claim 9, further comprising:
emitting signals in accordance with a user touching the soft buttons, said emitted signals mimicking those that the original remote control being emulated emits when the corresponding actual buttons are pressed thereon.

11. The method of claim 8, further comprising:

receiving descriptions for original remote controls from a source external to the universal remote control, said received descriptions being stored in step (a).

5 **12.** A universal remote control for emulating one or more original remote controls having visual appearances that are different from one another, said universal remote control comprising:

means for storing descriptions of each original remote control to be emulated, said descriptions including information describing the visual
10 appearances of the original remote controls to which the descriptions apply;

means for determining which one of the original remote controls to emulate; and,

means for displaying a replica of the original remote control being emulated, said replica having a visual appearance substantially the same as the
15 original remote control being emulated.

13. The universal remote control of claim 12, wherein the means for displaying comprises a touch screen liquid crystal display.

14. The universal remote control of claim 12, further comprising:

means for providing in the displayed replica soft buttons that correspond
20 to actual buttons on the original remote control being emulated, said soft buttons having substantially the same appearance and relative location on the replica as the actual buttons have on the original remote control being emulated.

15. The universal remote control of claim 14, wherein the means for providing comprises a graphic user interface.

25 **16.** The universal remote control of claim 14, further comprising:

means for emitting signals in accordance with a user touching the soft buttons, said emitted signals mimicking those that the original remote control being emulated emits when the corresponding actual buttons are pressed thereon.

17. The universal remote control of claim **16**, wherein the means for emitting comprises at least one of an infrared transmitter that emits infrared signals or a radio frequency transmitter that emits radio frequency signals.

18. The universal remote control of claim **12**, further comprising:
5 means for receiving descriptions for original remote controls from a source external to the universal remote control, said received descriptions being stored in the means for storing.

19. The universal remote control of claim **18**, wherein the means for receiving comprises at least one of a serial port, a universal serial bus port, or a
10 communications port.